descriptor with at least one of the plurality of segments, the descriptor(s) being responsive to the at least one preestablished content category; and producing a segment map that provides for a variable arrangement of the plurality of segments.

IN THE CLAIMS:

Please cancel the outstanding claims of the invention, namely claims 1-8, 39-49, and 72 drawn to a video editing system, without prejudice or disclaimer to their underlying subject matters, and insert new claims 73-76 also drawn to a video editing system as follows:

-- 73. A video editing system, comprising:

defining means for defining, responsive to at least one preestablished content category, a plurality of segments in a video;

descriptor means for associating at least one descriptor with at least one segment of said plurality of segments, said at least one descriptor being responsive to said at least one preestablished content category; and

mapping means for producing a segment map that provides for a variable arrangement of said plurality of segments.

74. A video editing system, comprising:

defining means for defining, responsive to at least one preestablished content category, a plurality of segments in a video, said plurality of segments including at least one parallel segment;

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descriptor means for associating at least one descriptor with at least one segment of said plurality of segments, said at least one descriptor being responsive to said at least one preestablished content category; and

mapping means for producing a segment map that provides for a variable arrangement of said plurality of segments.

75. A method of editing a video, comprising the steps of:

defining, responsive to at least one preestablished content category, a plurality of segments in a video;

associating at least one descriptor with at least one segment of said plurality of segments, said at least one descriptor being responsive to said at least one preestablished content category; and

producing a segment map that provides for a variable arrangement of said plurality of segments.

76. A method of editing a video, comprising the steps of:

defining, responsive to at least one preestablished content category, a plurality of segments in a video, said plurality of segments including at least one parallel segment;

associating at least one descriptor with at least one segment of said plurality of segments, said at least one descriptor being responsive to said at least one preestablished content category; and

producing a segment map that provides for a variable

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arrangement of said plurality of segments. --

I. INTRODUCTION

At the outset, applicant wishes to thank the Examiner for the conscientiously prepared Office Action of November 17, 1994 ("Office Action"). The Office Action and the references cited therein have now been carefully studied. Reconsideration and allowance of this application are earnestly solicited.

Responsive to the Notice Of Draftsperson's Patent Drawing Review, formal drawings sheets of FIGS. 1-6 are submitted.

Responsive to the objection to the title of the invention, a new title is submitted.

Responsive to the objection to the Abstract of the Disclosure, a new Abstract page is submitted.

Responsive to the rejection of the outstanding claims under 35 U.S.C. § 112, second paragraph, applicant requests that the outstanding claims of the invention be canceled without prejudice or disclaimer to their underlying subject matters, and replaced with new claims 73-76 also drawn to a video editing system.

II. PRO SE CASE

This is a pro se case. This amendment includes applicant's request for assistance under 35 U.S.C. § 707.07(j).

III. STATUS OF CLAIMS

Responsive to a restriction requirement dated June 15, 1993,

Paper Number 9, and the communication dated October 6, 1993,

Paper Number 13, applicant elected without traversal group I

claims 1-11 and 39-42, drawn to a video editing system to be

examined and added claims 42-72 also drawn to a video editing

system. The outstanding Office Action has withdrawn from

consideration claims 50-71 as being directed to a non-elected

invention. Responsive to the Office Action, the previously

pending claims have been replaced with new claims 73-76 also

drawn to a video editing system.

IV. STATUS OF AMENDMENTS

The response to the restriction requirement canceled and

added claims to the original set of claims. Responsive to the

Office Action, and in a sincere effort to place the application

in a condition for allowance, the instant amendment is

respectfully submitted.

V. SUMMARY OF THE INVENTION

The present invention is directed to an apparatus and method

for defining segments in a video with respect to preestablished

content categories, associating descriptors with the segments

according to at least one of the preestablished content

categories, and producing a segment map that provides for a

variable arrangement of the plurality of segments.

> "Existing program editing requires producing a unique
> linear sequence of segments. The editing of the present
> invention 460 requires a parallel non-sequential logical
> arrangements of segments."...

"The beginning frame and end frame in each of the relevant segments is identified, the segment content is assigned a descriptor as per the category and rating structure, and logical entry and exit references are assigned 470." (Specification page 18, lines 16-27)

"The resulting segment information is mapped and the required user interface produced 480 to permit the viewer, by selecting the desired rating level in each of the categories, to view a unique continuous sequence of segments consistent with the designated viewer preference structure." (Specification page 19, lines 7-11)

As detailed in the specification, the segment map, that is created by an editor editing a video, provides for a variable arrangement of the segments of the video. The segment map permits a viewer to automatically obtain for viewing a customized version of the video without requiring the viewer to have knowledge of, or interaction with, the segments. The segment map provides the information necessary for the viewer's video player apparatus to automatically create a customized seamless version of the video that is responsive to the viewer's content preferences.

Where the variable content architecture of the present invention is fully implemented, the segment map provides the "capabilities for automatically selecting among parallel and overlapping segments to provide a video program that is highly responsive to viewer control over its content." (Specification page 10, lines 9-11)

It is noted that a distinction and a temporal relationship are established herein between an editor, who utilizes the video editing system of the present claims to edit a video and produce a segment map, and a viewer that will, in due course, use a video

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player that advantageously utilizes the segment map to automatically produce a customized version of the video.

VI. ISSUES

Whether the present claims are directed to a non-elected invention. Whether the present claims would be properly rejected under 35 U.S.C. § 102(b) as being anticipated by Westland. Whether the present claims would be properly rejected under 35 U.S.C. § 103 as being unpatentable over Westland in view of Kawai or Vogel. Whether the present claims would be properly rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

VII. GROUPING OF CLAIMS

The claims do not stand or fall together as each defines the invention with a different degree of specificity and with a different degree of structural implementation.

VIII. ARGUMENTS

A.   Claims drawn to a video editing system comprising
      a segment map or segment mapping means are drawn
      to the elected invention.

With respect to claims 43-72 that were added as part of a response to a restriction requirement, the Office Action asserts

that:

> "Newly submitted claims 50-71 are directed to inventions that are independent or distinct from the invention originally claimed for the following reasons:
> The invention of claims 50-64 requires the specific mapping means for producing a segment map responsive to the at least one segment definition and descriptor." (Page 2, lines 2-7)

The original claims of the present invention, claims 1-42 were subjected, by a previous Examiner, to a restriction requirement. The restriction requirement stated:

> "Restriction to one of the following inventions is required under 35 U.S.C 121:
> Group I. Claims 1-11 and 39-42, drawn to a video editing system, classified in class 360, subclass 13.
> Group II. Claims 12-13, drawn to program rating system, classified in class 352, subclass 6.
> Group III. Claims 14-20 and 22-38, drawn to a video cable transmission system, classified in class 358, subclass 141.
> Group IV. Claims 21, drawn to a cable transmission for appliance management, classified in class 455, subclass 6.1."

It is respectfully noted that the restriction requirement did not make a distinction among video editing systems as it did among cable transmissions. The restriction requirement did not create different groups among the original video editing system claims responsive to the various features, elements, embodiments, specificities, or structural implementations recited in that set of claims.

Accordingly, since applicant elected "Group I. Claims 1-11 and 39-42, drawn to a video editing system, to be examined", "new claims 43-72, also drawn to a video editing system", also fall within the selected group.

With respect to the specific reasons for the withdrawal of

claims 50-64 drawn to a video editing system, the Office Action states: "The invention of claims 50-64 requires the specific mapping means for producing a segment map responsive to the at least one segment definition and descriptor."

First, the Office Action does not assert that claims 50-64 are not drawn to a video editing system.

Second, with respect to a recitation of a segment map, it is noted that originally submitted dependent claim 7 and independent claim 42: i) were drawn to a video editing system; ii) were included in the Group I claims defined by the restriction requirement; iii) were elected for prosecution by applicant; and iv) explicitly recite a segment map.

> "7.   The video editing system of claim 1, further comprising:"...
> "a segment map logically linking said at least one segment in time-sequential order,"

> "42.   A video program editing system comprising:
> program segment defining means for dividing a video program into at least one segment"
> "content defining means for defining contents of said at least one segment in accordance with content labels;"
> "a segment map logically linking said at least one segment in time-sequential order;"

Third, claim 72, which was not withdrawn from consideration by the Office Action, recites: "mapping means for producing a segment map".

Therefore, applicant respectfully submits that claims drawn to a video editing system and reciting a "segment map" or "mapping means" are directed to the elected invention as defined by the restriction requirement, whether the segment map logically links said at least one segment in time sequential order, the

segment map is responsive to the at least one segment definition and descriptor, or the segment map provides for a variable arrangement of said plurality of segments.

Applicant does not wish to suggest that an Office Action may not further divide the previously defined Group I claims into two or more subgroups. However, if that action is deemed necessary, it is respectfully requested that applicant not be deprived of the opportunity to select among any newly defined subgroups.

Nonetheless, in an effort to materially reduce and simplify the issues for consideration, and to expedite the prosecution of this case, the twenty claims remaining in the Office Action have been replaced with four new claims which are believed are consistent with the invention originally selected for prosecution.

B.   **The claims are not anticipated by Westland under 35 U.S.C. § 102(b).**

The video editing system of Westland, U.S. Patent No. 4,685,003, is a precursor of current computerized nonlinear online and offline editing systems available from a variety of vendors.

It will be respectfully demonstrated below that neither Westland nor any of the video editing systems known to applicant, alone or in combination with the applied references, anticipate, suggest, or render obvious doing what is being presently claimed.

All the prior art video editing systems known to applicant

are designed to permit an editor to create a finished video

consisting of a linear arrangement of segments. Westland's

specification is repeatedly explicit on the linearity of the

resulting video. For example:

> "Referring to FIG. 1, a video composition system 10 has
> control console 12 from which an operator/editor controls
> the operation of the entire system and provides the
> composing instructions which enable the system to prepare a
> listing of video segments to be serially connected to form a
> finished composition sequence." (Column 5, lines 33-38)

The information for each linear arrangement of segments is

generally referred to as an edit decision list ("EDL"), and is

referred to in Westland as an "edit confirmation list". In both

online and offline nonlinear video editing systems, the EDL

defines a video of linear characteristics. An EDL does not and

cannot provide for a variable arrangement of segments.

The segment map of the present invention is not an EDL, it

does not define a linear arrangement of segments or a "serially

connected sequences of the segments". The segment map of the

present invention is to an EDL what a street map is to a single

set of directions. A segment map provides the information for a

video player apparatus to automatically generate over one

trillion possible EDLs for a single motion picture that is

responsive to twenty content categories each at four levels of

explicitness. It is respectfully submitted that a segment map

that provides for a variable arrangement of segments is

patentably distinguished from an EDL that provides for a linear

arrangement of segments.

It is noted that a number of firms that manufacture video

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editing systems have licensed and incorporate the Westland

technology in their products, and that Montage Group Ltd., a

manufacturer of a video editing system, is closely associated

with Lex Computing & Management Corp. 603-357-3950, the assignee

in Westland.

Neither the video editing system of Westland nor the one

available from Montage Group Ltd. 603-357-3950, nor any of the

other video editing systems that are available from, for example,

Adobe Systems Inc. 800-833-6687, Avid Technology Inc. 800-949-

2843, Data Translation Inc. 508-460-1600, ImMIX 916-272-9800,

Insync 301-831-5008, Radius 800-227-2795, and Touchvision Systems

Inc. 800-838-7466, are capable of producing, or render obvious

"producing a segment map that provides for a variable arrangement

of said plurality of segments" as is recited in each of the

claims of the present invention.

The point here should be clearly understood. Applicant has

not found a video editing system that can be utilized to define,

responsive to at least one preestablished content category, a

plurality of segments in a video; associate at least one

descriptor with at least one segment of said plurality of

segments, said at least one descriptor being responsive to said

at least one preestablished content category; and produce a

segment map that provides for a variable arrangement of said

plurality of segments, as is recited in each of the outstanding

claims of the present invention.

Not only do the present video editing systems fail to

anticipate or render obvious doing what is being claimed, the
fact is that the video editing systems known to applicant teach
away from doing what is being claimed.

As will be respectfully demonstrated below, the claims of
the present invention are further patentably distinguished from
Westland.

The Office Action asserts, on page 6, lines 8-10, that the
video composition method and apparatus of Westland includes:
"content defining means for defining contents of at least one
segment in accordance with content labels (col. 4, lines 3-4)"

In column 4, lines 3-4, Westland recites: "each segment
having associated therewith at least one digitized frame." In
the video editing apparatus and method of Westland:

> "A video label is, in the context of this invention, a
> representation derived from a frame of source material. A
> typical label is a low resolution digital representation of
> a high resolution source image. Such a label can be
> electronically stored and accessed at high speeds, yet when
> viewed by an operator, the label provides nearly the same
> information as the corresponding high resolution source
> material." (Column 2, lines 47-54)

In a video editing system, a segment identifier must be
unique. The means and methodology by which Westland generates
the labels can be expected to produce unique identifiers.
Whether in a conventional linear arrangement of segments or in
the novel variable arrangement of segments of the present
invention, the low resolution images of Westland offer an elegant
means of identifying a segment.

The descriptors of the present invention are not intended
to, and cannot serve to uniquely identify a segment. As is

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detailed in the specification, the same descriptor (e.g.
violence) is likely to be assigned to a plurality of segments in
a video. If the identifying labels of Westland were replaced by
the descriptors of the present invention, an editor would not be
able to distinguish among the many segments which would be
assigned the same descriptor.

Contrary to the Office Action suggestion, the descriptors of
the present invention are not a substitute for, and cannot be
substituted by, the labels (defining means) of Westland. For
this and other reasons, the editing system of the present
invention teaches both a defining means for defining segments and
a descriptor means for associating a descriptor with the defined
segments. As is specifically recited in claim 73 and similarly
recited in each of the other claims of the present invention:

> "defining means for defining, responsive to at least
> one preestablished content category, a plurality of segments
> in a video;
> descriptor means for associating at least one
> descriptor with at least one segment of said plurality of
> segments, said at least one descriptor being responsive to
> said at least one preestablished content category;"

The low resolution digital representation of a high
resolution source image of Westland neither anticipates nor
renders obvious "associating at least one descriptor with at
least one segment of said plurality of segments, said at least
one descriptor being responsive to said at least one
preestablished content category;" as is recited in each of the
claims of the present invention.

It is respectfully submitted that the claims of the present

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invention are further patentably distinguished from Westland with respect to a temporal relationship that is established in defining segments and assigning descriptors in response to preestablished content categories.

As is detailed with respect to FIGS. 1A-1C, the editing system of the present invention requires that content categories be established in advance of the segment definitions. The wording of the claims explicitly recite that both the segment definitions and the descriptors are responsive to "at least one preestablished content category".

The specification explains that the advantages of defining segments with respect to preestablished content categories is that a variety of videos will behave similarly to the automatic application of a viewer's preestablished content preferences. Regardless of the particular video selected, a viewer will not need to interact with the video to obtain a customized version that is consistent with the viewer's content preferences.

Thus, the video editing system of Westland, principally distinguished by the low resolution digital representation of a high resolution source image, does not anticipate, teach, suggest, render obvious, either the means, the methodology, or the advantages of associating descriptors with segment definitions according to preestablished content categories and producing a map of the segment definitions and assigned descriptors that provides for a variable arrangement of a video, as is specifically recited in claim 75 and similarly recited in

each of the other claims of the present invention:

> "defining, responsive to at least one preestablished content category, a plurality of segments in a video;
> associating at least one descriptor with at least one segment of said plurality of segments, said at least one descriptor being responsive to said at least one content category; and
> producing a segment map that provides for a variable arrangement of said plurality of segments."

Due to the indefiniteness of the limitation, the Office Action disregarded the parallel segment limitations. (Page 5, last 5 lines)

The specification of the present invention teaches the use of parallel, transitional, and overlapping video segments to enhance the customization and the seamless continuity among non-sequential segments. Parallel segments are segments in a variable content video that differ from each other principally with respect to the level of explicitness or detail.

> "In this manner, parallel and transitional segments provide a rating selection mix ranging from a segment excluding bloodshed 522 to a segment including graphic bloodshed 523, as well as the segment including explicit bloodshed. As a result, the particular scene of which these segments are a part may be viewed at any of the three rating levels." (Page 20, lines 29-30, and Page 21, lines 1-5)

As is further detailed in the specification, the utilization of parallel segments offers significant creative and viewing advantages.

> "Both of these versions may be provided as parallel segments in a program, challenging the artist to create greater variety in the form of expression permitting the viewer to decide for themselves the level of censorship that they may desire." (Page 18, lines 7-11)

Parallel, overlapping, and transitional segments are an important and distinguishing element of the present invention.

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Neither Westland, nor any of the other video editing systems provide a means for completing a video comprising parallel segments. It is respectfully submitted that parallel segments further patentably distinguish the video editing system of the present invention from the other editing systems known to applicant.

The editing system of Westland, alone or in combination with the other applied references does not comprise the means or methodology for defining parallel segments in a video, or for producing a segment map providing for a variable arrangement of a plurality of segments that includes a parallel segment. Claim 74, for example, recites:

> "defining, responsive to at least one preestablished content category, a plurality of segments in a video, said plurality of segments including at least one parallel segment;"

The advantages of the patentably distinguished features and methodology of the present invention as claimed, will be further appreciated by the following review of the other applied references.

C.   The claims are patentable over Westland in view of Kawai and/or Vogel under 35 U.S.C. § 103.

Vogel

In Vogel, U.S. Patent No. 4,930,158, a video playing system "relies on the presence of a program classification code within the video signal" (Column 2, lines 55-57) for causing the video

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program to be suspended or terminated.

Assigning descriptors and producing a segment map as per the present invention are patentably and advantageously distinguished from incorporating the classification code within the video signal as taught by Vogel.

The advantages of the system of the present invention are also apparent with respect to the objects of Vogel. For example, in Vogel: "Microcomputer 6 continues reading replayed codes from classification detector 5 until the REPLACED code is no longer detected," (Column 5, lines 31-33) Including a segment map at the beginning of the video, would provide the microcomputer with the required segment information to effect a faster positioning of the tape beyond the material to be replaced. While Vogel must have appreciated that a video tape can be fast forwarded at a significantly higher rate when information does not need to be retrieved, Vogel failed to appreciate the advantages of a segment map over a program classification code within the video signal.

Further, contrary to what occurs in Vogel, in the present invention the presence of undesirable segments does not cause the video program to be suspended or terminated.

Still further, since Vogel can only cause the replay of "the video program to be suspended or terminated" during the transmission of the relevant classification code, Vogel, compensates for the resulting dead segments by "providing means for replacing the unwanted program with programme from another source." (Column 5, lines 12-14) Thus, Vogel teaches away from

the segment map of the present invention, which advantageously

provides the means for avoiding dead segments without requiring a

secondary video source.

Vogel in concluding recites that:

"The invention is also not limited to applications with tape
as the recording medium, being equally suited to use with
video disk or any other video storage technique. (Column 6,
lines 20-23, emphasis added)

Since Vogel is conceptually bounded by the linearity of

conventional videos it did not appreciate that a disk is not just

"any other storage technique". Vogel did not anticipate that in

a video disk embodiment there is no need for a methodology that

causes "the replay of the program to be suspended or terminated."

The same conceptual failings in Vogel, as in Westland, causes

Vogel to teach away from the segment map of the present invention

as recited in the claims, and detailed in the specification of

the present invention.

Advancing a motivation for the combination of Westland and

Vogel, the Office Action, at the bottom of page 8 provides the

following citation in Vogel:

"The classification code used by this invention can also be
used to provide other useful additional functions, such as
displaying the title of the program being played, locating a
particular program on a videotape," (Column 6, lines 24-27)

Thus the Office Action asserts that:

"It would have been obvious to one of ordinary skill in the
art to provide the classification code of Vogel to the
apparatus of Westland for the same reasons such that the
classification code are utilized to locate a particular
program on a video tape". (Page 9, lines 4-7)

If it would have been obvious to do what is proposed by the

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Office Action, doing so would neither anticipate nor render obvious what is being claimed. The asserted motivation derives from the fact that the classification codes are utilized as unique identifiers, i.e. the "title of the program being played" or "locating a particular program". If the editing system of Westland were to be modified to identify a segment by a title rather than by, or in addition to, the low resolution digital representation, such a system would not anticipate, or render obvious the descriptors of the present invention as claimed.

Further, it is respectfully submitted that even if a motivation can be successfully argued for modifying Westland in view of Vogel, a rejection of the claims under 35 U.S.C. § 103 require that the teachings of Vogel be applied, and not the teachings of the present invention.

Vogel repeatedly, explicitly, and unambiguously teaches a video playing system that requires "A classification code, recorded repeatedly along with program material," (Abstract). "The operation of this embodiment relies on the presence of a program classification code within the video signal." (Column 2, lines 55-57) It is noted that this approach is consistent with the approach in Westland, where the low resolution image is obtained from the video stream.

If the teachings of the video playing system of Vogel were applied to the editing system of Westland, Westland would not produce a segment map. Vogel would have Westland, naturally and elegantly, insert the classification code in the signal as the

video is edited.   Vogel teaches that:

> ..."it is possible, using this embodiment, to include a code
> in the recording, for subsequent use in restricting viewing.
>   One way this can be achieved is by entering a code,
> using keyboard 7, prior to or during recording.
> Microcomputer 6 sends the input code to the classification
> code inserter 12, where the <u>code is combined with the video
> signal being recorded</u>." (Column 4, lines 49-56, emphasis
> added)

Even if there was a motivation for the combination of

Westland and Vogel, Vogel provides evidence that the combination

would not produce the results of the present invention, or

renders obvious doing what is claimed by the present invention.

The structure and methodology of the combination teaches away

from the present invention.

Further, with respect to the parallel segment limitations,

it should be appreciated that the playing system of Vogel lacks

the means and methodology to cause the skipping of lower rated

segments than the viewed segment.   In Vogel, a segment of a scene

having an acceptable code would be played regardless of whether

other parallel segments of that scene were played or were

available to be played.   The player of Vogel cannot navigate

among the intertwined sets of segment definitions that

distinguish a variable content video.

Neither the video editing system of Westland, nor any of the

other editing systems known to the applicant, alone or in

combination with the other applied references, provide a video

editing system comprising the means and the methodology for

accomplishing the following:

> ..."In this example, scene three includes four segments,

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segment 3b begins at frame 4112 and ends at frame 6026. The next segment, 3c, begins at frame 6027."... (Page 19, lines 23-26)

"To provide for the option of editing-out the explicit bloodshed, the program content map includes an additional segment definition beginning at frame 4112 and ending at frame 5205. The end of this segment 512 is linked to a new transitional segment 513 beginning at frame 35205 and ending at 35350, the end of which is linked to frame 6027. In this fashion, frames are omitted and added to provide a continuous transparent edited version of segment 3b. This frame sequence is associated with the corresponding segment content rating to indicate the absence of bloodshed 522. In all other respects the segments 512/513 is equivalent to the original segment 511." (Page 20, lines 5-16, emphasis added)

The advantages of doing what applicant has done has not been appreciated by the references of record. The fact that the invention solves a meaningful problem, that it represents an economic opportunity, and that it has not been implemented by now, indicates that the invention is not obvious from the teachings of the prior art or its advantages are not obvious from the teachings of the prior art.

Kawai

As indicated previously, applicant has elected to materially reduce and simplify the issues for consideration, and to expedite the prosecution of this case. As part of this effort, applicant has canceled claims reciting the keyword features of the present invention. Nonetheless, applicant in anticipation of filing a divisional application drawn to the keyword embodiment, offers the following in response to the Office Action assertions with respect to the teachings of Kawai.

In the "Information Searching System for Image Data" of Kawai, U.S. Patent No. 5,107,343, a first recited object is:

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"an information searching system for image data in which video images of desired real moving picture and still picture can be searched and obtained by using character or symbol as a key word." (Column 1, lines 38-41)

The Office Action asserts that:

"Kawai discloses an information searching system for image data which utilizes a character or symbol as a key word to retrieve and display corresponding segments data with associated piece of music." (Page 7 last paragraph, emphasis added)

In Kawai, a "key word" is entered to identify, for example, a "singer name" or "album name". Subsequent to an entry, the associated titles of songs and appropriate symbols are displayed in a table in preparation of the input by the mouse. (Columns 5-6)

"Accordingly, when the display condition is as shown in FIG. 4A, if the "V" mark of the marks Mi is designated by the mouse 18, the real moving picture and the sound of the music of musical title attached with the "V" mark are reproduced from the laser disc 38, whereby the real moving picture is displayed on the picture screen of the display apparatus 34," (Column 7, lines 64-68 and Column 8, lines 1-2)

It is respectfully submitted that Kawai fails to anticipate, teach, suggest, provide the motivation for, or render obvious, defining segments in the real moving picture (video) and assigning keywords to the defined segments.

Neither the frame-label means and methodology of Westland nor the titling and icon means and methodology of Kawai, provide the motivation for the means or the methodology for defining a plurality of segments of a video, assigning keywords to the segments, and producing a segment map responsive to the plurality of segments and assigned keywords to facilitate the retrieval of segments from a video by inputing keywords.

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The second recited object in the patent to Kawai is:

"an information searching system for image data in which a compact disc and the laser disc can be organically and effectively combined, to thereby be utilized as a highly sophisticated data base." (Column 9, lines 56-59)

It is respectfully submitted that Kawai neither "organically" nor "effectively" combines the compact disc and the laser disc. For example, Kawai claims that in step 71:

"if the sound is reproduced from the CD-ROM 17, the reproduction of that is never interrupted.
    Then, the processing proceeds from step 71 to step 72, and in step 72, the address Jj is supplied to the CD-ROM player 15 and the CD-ROM interface 16, whereby the CD-ROM player 15 and the CD-ROM interface are placed in the playback mode for reproducing the still picture digital video image data Ds. Thus, the video image data Ds is generated from the address Jj of the CD-ROM 17 through the CD-ROM interface 16." (column 8, lines 24-39)

Kawai does not teach how the CD-ROM can simultaneously continue to provide the audio and retrieve the video image.

Therefore, even if Westland and Kawai were combined, there is no evidence to support the assertion that the combination, in the absence of the teachings of the present invention, would "effectively" accomplish the substantial modifications, deletions, and additions that would be required to produce the results of the present invention.

Young et al.

The Office Action did not rely upon but considered pertinent the patent to Young et al. ("Young"), U.S. Patent No. 5,353,121, which details a "Television Schedule System". For purposes of completeness of response, applicant also disregards, the issue of whether the matter which may be considered pertinent is in fact

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prior art to the instant application.

The Office Action states that "Young et al. discloses a
television schedule system which includes content categories
ratings similar to the instant claims." (Page 9, lines 14-16)

In Young, as detailed with respect to FIGS. 14-17, to obtain
a listing of programs, a viewer may specify a theme (e.g.
Movies), a topic (e.g. Comedy), and a qualifier (e.g. four stars
****).

> "These qualifiers perform a logical OR functions; they will
> select for display all listings (sorted first by theme and
> topic) that satisfy the qualifiers." (Column 15, lines 19-
> 22)

Among the qualifiers shown on FIG. 14 are qualifiers labels
marked "G", "PG", "NR" and "R". While applicant could not find
where Young explains these labels, it is reasonable to presume
that they are the Motion Picture Association of America ("MPAA")
ratings assigned to movies. Unlike Young, the specification of
the present invention provides a detailed discussion of the MPAA
rating system, excerpts of which follow:

> "In the MPAA published booklet 'The Voluntary Movie Rating
> System', the MPAA spells out the purpose of the rating
> system: 'if you are 17 or over, or if you have no children,
> the rating system has no meaning for you. Ratings are meant
> for parents, no one else.' Accordingly, the rating system
> used by the MPAA has adopted a generalized structure that
> has inherent limitations since it admittedly has ignored the
> varying sensibilities and tastes among different adults e.g.
> non-parents, young adults, or senior citizens. The rating
> system is thus inadequate for a large portion of the viewing
> public." (Page 2, lines 12-22)

The specification of the present invention already points
out the inadequacies of the MPAA rating system with respect to
the system of the present invention:

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"The MPAA rating system does not by, deliberate design, address segment specific subject matter information that is required to provide adults with a highly discriminatory control over the content of segments contained within the selected program." (Page 4, last line, and Page 5, lines 1-4)

It is respectfully submitted that the use of the MPAA rating system in the Television Schedule System of Young does not contribute anything new to the issues at hand. In Young, the qualifiers, including an MPAA rating, correspond to a program and not to specific segments in the program.

It is respectfully submitted that the claims of the present invention do not require a novel descriptor or rating system to patentably distinguish from the teachings of the prior art. The editing system of the present invention could accommodate a variety of rating systems including adaptations of the rating system utilized by the MPAA or the competing rating system of the Film Advisory Board ("FAB").

It is precisely in recognition of applicant's nobel and unobvious contribution, that the FAB, a film rating organization "dedicated to recognizing family entertainment in the areas of television, video and motion pictures", has voted its "Award of Excellence" to applicant's work, calling it a "revolutionary invention". (Copies of the notification letter were provided in a prior communication dated May 3, 1993.)

Westland, alone or in combination with the other applied references, with or without Young, neither anticipates nor renders obvious the video editing system of the present invention, as is specifically recited by claim 76, and similarly

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recited by the other claims of the present invention:

> "defining, responsive to at least one preestablished content category, a plurality of segments in a video, said plurality of segments including at least one parallel segment;
> associating at least one descriptor with at least one segment of said plurality of segments, said at least one descriptor being responsive to said at least one preestablished content category; and
> producing a segment map that provides for a variable arrangement of said plurality of segments."

Improper and Insufficient Combinations

It is respectfully submitted that the applied references themselves do not suggest the particular combination of elements and methodologies asserted by the Office Action.

Each of the applied references is complete and functional in itself, and pursues different and unrelated objectives. It is respectfully noted that, on the one hand, the Office Action withdrew from the set of claims drawn to a video editing system a substantial number of claims drawn to a video editing system as being directed to inventions that are "independent or distinct"; and on the other hand, the Office Action has utilized combinations of a video editing system (Westland), a video playing system (Vogel), an information searching system (Kawai), and a television schedule system (Young).

As evidenced herein, it is respectfully submitted that the Office Action ascribes certain teachings to the applied art which are inconsistent with, or absent from a reading of the respective specification. The Office Action advances strained interpretations of the prior art that could be made only by hindsight.

It is respectfully submitted that the Office Action utilizes the teachings of the present invention to selectively extract elements of the applied references while ignoring that the reference's utilization of the element teaches away from the present invention. For example, Westland teaches away from the segment map by teaching that segment definitions can be temporary in character: "Thereafter, the group of segments is treated as a single segment and is represented by a single label pair." (Column 27, lines 30-32); Vogel teaches away from the segment map: "the code is combined with the video signal being recorded"; Young teaches away from the structure and function of the segment map: "These qualifiers perform a logical OR functions; they will select for display all listings (sorted first by theme and topic)".

As stated by in re Schaefer, 229 F.2d 476, 108 U.S.P.Q. 326 (CCPA 1956):

> "[T]o determine whether the combination of references is improper, the following criterion is often used: namely, whether the prior art suggests doing what applicant has done ... [I]t is not enough for a valid rejection to review the prior art in retrospect once an applicant's disclosure is known. The art applied should be viewed by itself to see if it fairly disclosed doing what an applicant has done."

Here, it is abundantly clear that the cited references simply do not suggest the combinations that have been applied nor disclose or suggest doing what appellant has done.

Even if the applied references are combined, they do not themselves yield all the structural elements and methods of the present invention. The applied combinations lack a completeness

and integration of elements and methodology that is required to operate as, produce the results of, or render obvious the editing system of the present invention. The video editing system of Westland, alone or in combination with the video player of Vogel, or the information searching system of Kawai, or the television schedule system of Young, do not render obvious doing what the video editing system of the present inventions does. The results achieved by the present invention are conceptually and patentably distinguished from the results achieved by Westland, and are not rendered obvious in view of Kawai and/or Vogel.

D.   **The mere instructive rejection of claims under 35 U.S.C. § 112, second paragraph, is inconsistent with what is required under MPEP Section 707.07(j).**

Applicant appreciates the effort that the Examiner has made with respect to the 35 U.S.C. § 112, second paragraph, rejection. However, it is respectfully submitted that the mere instructive rejection of the claims under 35 U.S.C. § 112, second paragraph, is inconsistent with what is required of the Examiner under MPEP Section 707.07(j).

The first paragraph of MPEP Section 707.07(j) teaches:

"When, during the examination of a pro se case, it becomes apparent to the Examiner that there is patentable subject matter disclosed in the application, the examiner shall draft one or more claims for the applicant and indicate in his or her action that such claims would be allowed if incorporated in the application by amendment."

While applicant has acquired some ability in the prosecution of his various patent applications and has relied on a variety of

sources for assistance, applicant does not claim an expertise in the art of drafting claims. For example, applicant has not attempted to once more apply the "Markush" teachings of David Pressman's "Patent It Yourself" book to the parallel, transitional, and overlapping segments feature of the present invention.

For these reasons, it is respectfully requested under MPEP Section 707.07(j) that, if by the arguments that have been presented, patentable subject matter is shown to be disclosed in the application and applicant's pending claims are directed to such matter but are not deemed by the Examiner to be entirely suitable, the Examiner please draft amendments to the claims that will place them in a condition for allowance.

IX. REQUEST UNDER MPEP § 707.07(f)

The specification of the present application, and the remarks herein, comprise a plurality of assertions with respect to the advantages of the present invention over the references of record.

Section 707.07(f) of the MPEP teaches that:

"If it is the examiner's considered opinion that the asserted advantages are without significance in determining patentability of the rejected claims, he or she should <u>state the reasons</u> for his or her position in the record." (Emphasis added)

The following teachings are also provided by § 707.07(f):

"The importance of answering such arguments is illustrated by In re Herrmann et al., 1959 C.D. 159; 739 O.G. 549 where applicant urged that the subject matter claimed produced new and useful results. The court noted that since applicant's

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statement of advantages was not questioned by the examiner
or the Board of Appeals, it was constrained to accept the
statements at face value and therefore found certain claims
to be allowable."

Accordingly, applicant respectfully requests under MPEP §
707.07(f) that if it is the Examiner's considered opinion that
each of the asserted advantages detailed, in the specification,
and the remarks herein, are without significance in determining
patentability of the claims, that the Examiner please state the
reasons for Examiner's position in the record. In so doing
applicant will know that each of the asserted advantages have
actually been considered by the Examiner, and applicant will have
an opportunity to respond to the Examiner's position.

X. NOTES

By the above remarks, applicant has attempted to diligently
respond to each of the significant issues raised by the Office
Action. The remarks herein presented have been drafted to
specifically respond to the Office Action. For purposes of
presentation, the remarks have been presented in as simple a
manner as possible, and do not embody the complexity, richness,
or breadth of the specification of the present invention.

If a particular assertion or remark in the Office Action is
deemed not to be directly or indirectly addressed, it should not
be interpreted as indicating that applicant is in agreement with
such an assertion or remark. Nothing herein should be construed,
interpreted, or understood as limiting, or otherwise constraining
the specification of the present application or the scope of the